

Geometry 8.6 Assignment: Proportions in Similar Triangles (pp 498-501)

1. What is your name?

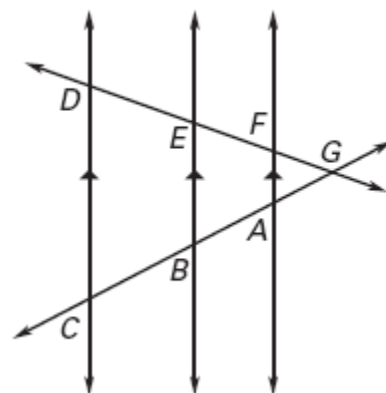
Use the figure to complete the proportions.

2. $\frac{DC}{FA} = \frac{\quad}{AG}$

3. $\frac{CB}{BA} = \frac{\quad}{EF}$

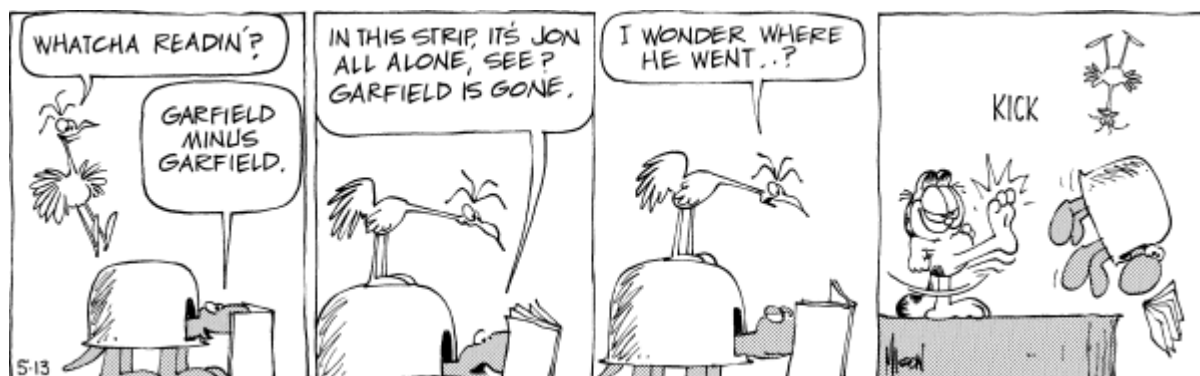
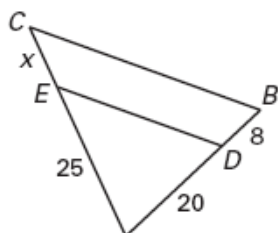
4. $\frac{EG}{ED} = \frac{\quad}{CB}$

5. $\frac{GF}{FA} = \frac{GD}{\quad}$



Determine a value of the variable so that $\overline{DE} \parallel \overline{BC}$.

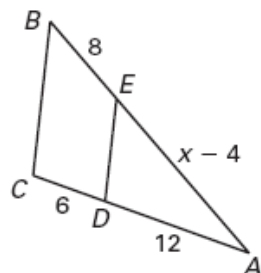
6.



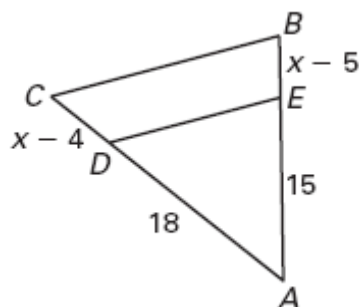
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Determine a value of the variable so that $\overline{DE} \parallel \overline{BC}$.

7.



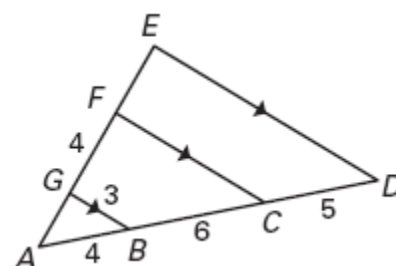
8.



Determine the length of each segment.

9. AG

10. ED



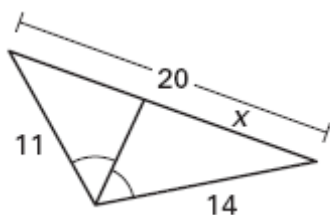
11. FC

12. AE

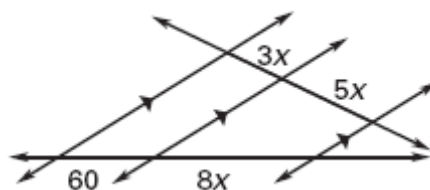
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Find the value of the variable.

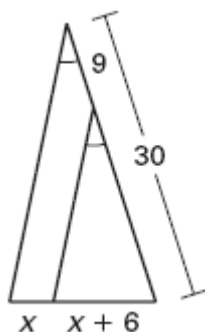
13.



14.



15.

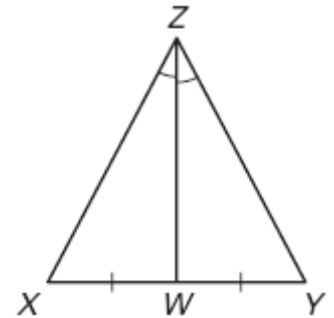


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16. Complete the Proof.

Given: \overline{WZ} bisects $\angle XZY$.
 $XW = WY$

Prove: $XZ = ZY$



Review.

Find the distance between the two points. Write your answer as a simplified radical. (*Chapter 1 Section 3*)

17. $(7, -3)$ & $(-9, 4)$

18. $(0, -10)$ & $(4, 7)$

19. $(-1, -9)$ & $(6, -2)$

20. $(8, -5)$ & $(0, 4)$

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21. Sketch a right triangle with legs of 12 units and 9 units. Find the length of the hypotenuse. *(Chapter 4 Section 7)*

22. Sketch a rectangle with length 16 units and width 12 units. Find the length of a diagonal. *(Chapter 4 Section 7)*

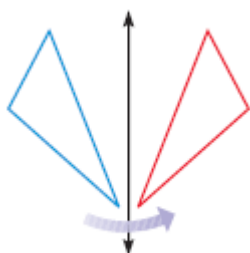
23. Sketch an isosceles right triangle with legs of 6 units. Find the length of the hypotenuse. *(Chapter 4 Section 7)*

24. Sketch an isosceles triangle with base of 16 units and height of 6 units. Find the length of the legs. *(Chapter 4 Section 7)*

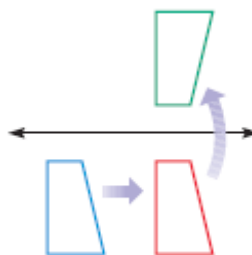
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Name the type of transformation. (Chapter 7)

25.



26.



27.

